MOSAIC
ELECTRONICS P.O. BOX 748 • OREGON CITY, OREGON 97045

32K RAM BOARD

The Only Choice For Serious Atari Owners!

INSTALLATION INSTRUCTIONS

TABLE OF CONTENTS

32K INSTALLATION INSTRUCTIONS FOR THE **ATARI 800** COMPUTER 2

32K INSTALLATION INSTRUCTIONS FOR THE **ATARI 400** COMPUTER 4

ATARI 400 GENERAL PRECAUTIONS

- Metal Screws 5
- Keyboard 5
- Power Board Connector 6
- RAM Board 6

ATARI 400 DISASSEMBLY INSTRUCTIONS 7

ATARI 400 ILLUSTRATIONS 9

VERIFICATION OF OPERATION 10

GUARANTEE 11

WARRANTY 11

NOTES 12

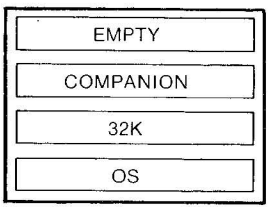
32K INSTALLATION INSTRUCTIONS FOR THE ATARI 800 COMPUTER

The Mosaic 32K RAM Board should be used with an Atari 8K or 16K Board, or with the Mosaic Companion Board.

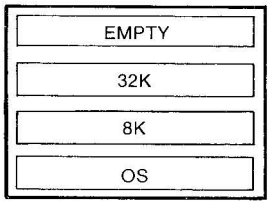
See the Memory Configuration Diagram (page 3) for valid combinations.

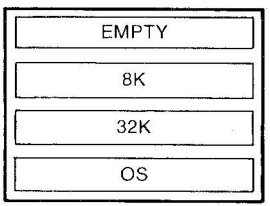
ATARI 800
MEMORY CONFIGURATION DIAGRAM

32K

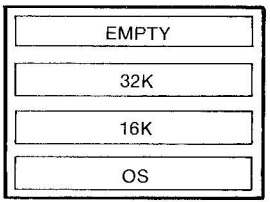


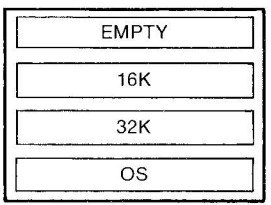
40K

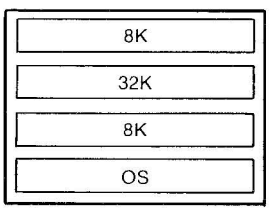




48K







32K INSTALLATION INSTRUCTIONS FOR THE ATARI 400 COMPUTER

Expansion of the Atari 400 to 32K is very easy.

In addition to the significant capabilities of 32K, you will find it extremely interesting to see the inside of your computer. Take your time and check-out anything that looks interesting. For your own convenience, pay attention to the placement of such things as the TV cable, speaker, keyboard, etc.

These instructions are designed to be used by both the beginner or someone who feels perfectly at home disassembling a computer. For the convenience of both skill levels, we have condensed the instruction set to be easily understood by both. Important details can be found in the precautions. We highly recommend that you skim through the precautions before beginning the actual disassembly. Refer back to them when instructed to throughout the text.

ATARI 400 GENERAL PRECAUTIONS

METAL SCREWS:

Though there appears to be only two sizes of screws, the threads on similar looking screws may be different. During disassembly, place the screws in such a manner that you can recall where they should be reassembled. Before removing any screws, note which screws are missing and reassemble as found.

When replacing screws, it is **not** important that they be tight. The metal is very soft and can be stripped with very little force. It is only important that the head of the screw come in contact with the metal.

KEYBOARD:

The keyboard connector must remain parallel with its socket during removal and during reassembly.

To disassemble, remove keyboard from its top housing (see figure 3 - page 9). Hold one hand near connector on mother board and gently lift keyboard straight up with the other hand (see figure 4).

To reassemble, place front edge of mother board on front edge of bottom housing and insert connector with long-nose pliers (see figure 5). All pins should insert simultaneously.

POWER BOARD CONNECTOR:

The power board easily disconnects from the mother board as shown in figure 2, after removing two metal screws.

During re-assembly, be sure that all of the connecting pins come in contact with their sockets. Then push gently, but firmly, until the pins are completely seated in place.

RAM BOARD:

The old RAM Board simply unplugs from its socket. Before removing it, be sure that you notice which direction it is oriented. The side with electronic parts should face toward the back of the computer. The blank side should face toward the keyboard. Insert the new 32K board exactly the same way. **Do not insert the board backwards!**

ATARI 400 DISASSEMBLY INSTRUCTIONS

To disassemble the computer, refer to figure 1 on page 9 and proceed as follows:

1. Disconnect all cables and remove ROM cartridge.
2. Turn computer upside-down and remove the four bottom screws.
3. Set computer upright and open ROM cartridge door.
4. Top housing can now be lifted. Apply pressure (as shown in figure 3) to free the keyboard. (SEE KEYBOARD PRECAUTION.)
5. Unplug keyboard from connector (see figure 4).
6. Unplug speaker.
7. Study placement of black TV cable and unplug from power board.
8. Remove two screws holding power board to top metal cover.
9. Open ROM cartridge door and unplug power board, apply pressure near connector (see figure 2). Cartridge door switch may also be removed at this time.
10. Lift mother board and top metal cover from bottom housing.
11. Remove screws from metal bottom cover. Pay attention to their locations. (SEE METAL SCREW PRECAUTION.)
12. Mother board can now be lifted from top metal cover.
13. Unplug RAM board from mother board. (SEE RAM BOARD PRECAUTION.)
14. Insert new 32K RAM board. **Do not insert backwards!**

ATARI 400 REASSEMBLY INSTRUCTIONS

After installing the 32K RAM board, review the precautions and use the disassembly instructions in reverse order to assemble your Atari 400.

ATARI 400 ILLUSTRATIONS

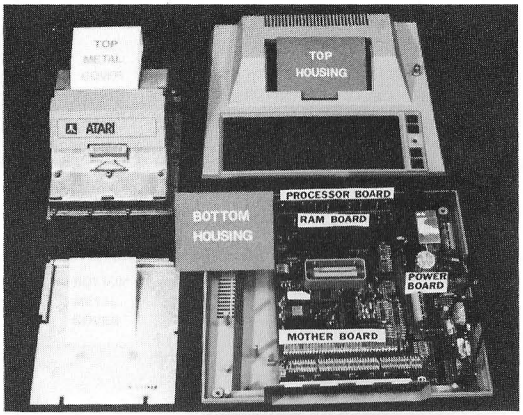


FIGURE 1

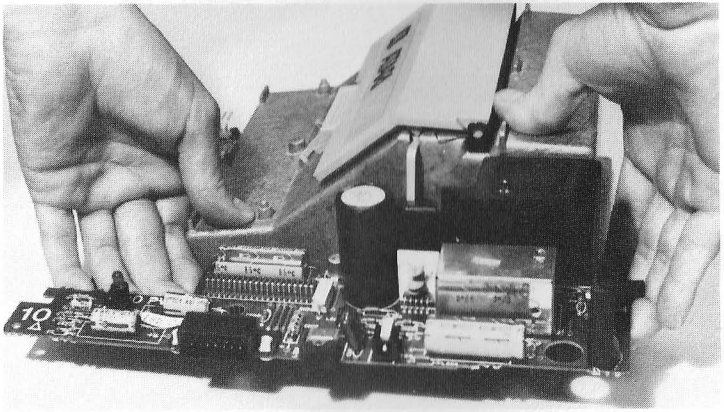


FIGURE 2

FIGURE 3

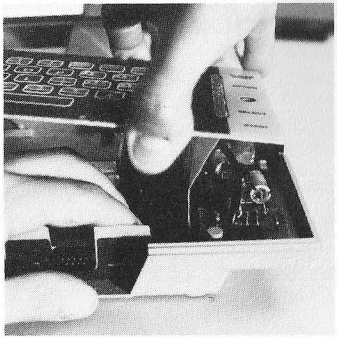


FIGURE 4

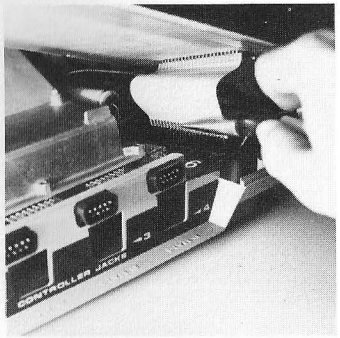


FIGURE 5

VERIFICATION OF OPERATION

After reassembly insert the basic cartridge and type:

PRINT FRE(0)

The ATARI 400 computer should reply with approximately 29,700.

The ATARI 800 computer should reply approximately as follows;

32K—29,700 40K—37,900 48K—37,900

With the basic cartridge inserted, the ATARI computer can only access 40K RAM.

Should something go wrong, repeat the installation procedures and read the precautions carefully.

If no problems can be found, return the 32K board to Mosaic with your name and address. We will test and/or replace it free of charge.

GUARANTEE

If the Mosaic 32K RAM Board ever fails to operate properly within one year from the date of purchase, ship it to the factory and Mosaic will either repair or replace it free.

WARRANTY

Return enclosed Guarantee Card to Mosaic within 10 days from date of purchase to qualify for Mosaics' one year free repair/replacement coverage.

Mosaic is not affiliated with ATARI in any way. ATARI is a registered trademark of ATARI, Inc.

NOTES

MOSAIC®
ELECTRONICS
P.O. Box 748
Oregon City, Oregon 97045

MOSAIC 32K RAM BOARD

4 - YEAR GUARANTEE

IF THE MOSAIC 32K RAM BOARD EVER FAILS TO OPERATE PROPERLY WITHIN FOUR YEARS FROM THE DATE OF PURCHACE, SHIP IT TO THE FACTORY AND MOSAIC WILL EITHER REPAIR OR REPLACE IT FREE!

MOSAIC™
ELECTRONICS
P.O. Box 748
Oregon City, Oregon 97045
(503) 655-9574

NAME _____

ADDRESS _____

_____

_____

_____

PURCHASE DATE _____

PLACE OF PURCHASE _____

_____

I HAVE AN: ☐ ATARI 400 OR ☐ ATARI 800